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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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RICHARD F. JAWORSKI  
Cooper & Dunham LLP  
1185 Avenue of the Americas  
New York, NY 10036

EXAMINER	
PANNALA, SATHYANARAYA R	
ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/721,639

Applicant(s)

HARVEY, RICHARD HANS

Examiner

Sathyanarayan Pannala

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Applicant's Amendment filed on 2/25/2005 has been entered. In this Office Action claims 1-5, 11-12 are pending.

### ***Drawings***

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann et al. (US Patent 6,085,188) hereinafter Bachmann, and in view of Byrne et al. (US Patent 6,347,312) hereinafter Byrne.

5. Bachmann teaches independent claims 1, 11 by the following:

“determining whether an instruction or operation adds information or removes information from the database system, wherein for an add operation, the information is first added to an ‘out’ table, and wherein for a remove operation, the information is first removed from an ‘in’ table” ( Fig. 7-8, col. 6, line 47 to col. 7, line 15). Bachmann teaches the parent table and child table, which is analogous to using two tables of in and out and explicitly does not teach the in and out tables. However, Byrne teaches two tables which are similar to the purpose of in and out tables as Type I cache (40) and Type II cache (42). Type I is for a set of identifiers which qualify for a given LDAP search query of a particular filter key and the unit is indexed by that filter key. This way the repetitive search queries are handled without resort to the relational database (38). Type one is the same as the in table. Whereas Type II cache maintains results of the query (Byrne, Fig. 5, col. 5, line 50 to col. 6, lines 11). The search is done first and the data is filled into Type II and then search query in Type I one will be retained. When the search query did not find the record, the query will not be retained in the Type I and the result will not be available to store in the Type II. Thus, it would have been obvious to one of ordinary skill in the data

processing art at the time of the invention, to combine teaching of the cited references because Byrne's teachings would have allowed Bachmann's method would have been efficient of handling of repetitive searches issued from a hierarchical directory service to a relational database backing store (Byrne, col. 2, lines 22-25).

6. As per dependent claim 2, Bachmann teaches "the information is added to the 'in' table after being added to the 'out' table" at Fig. 8, col. 6, line 60 to col. 7, line 15.

7. As per dependent claim 3, Bachmann teaches "the information is removed from the 'out' table after being removed from the 'in' table" at Fig. 7, col. 6, lines 47-59.

8. As per dependent claim 4, Bachmann teaches "determining whether the instruction modifies information, and if so, performing both the add and remove operations" at col. 5, lines 60-67.

9. As per dependent claims 5, 12 Bachmann teaches "the instructions are implemented via a directory system such as X.500 or LDAP" at Fig. 4A-C, col. 4, lines 22-35.

### ***Response to Arguments***

1. Applicant's arguments filed 2/25/2005 with respect claims 1 and 11 have been fully considered but they are moot in view of the new ground(s) of rejection.

a) Applicant's argument states as "It is respectfully submitted that there is no indication, either in the cited reference or in the Office Action, ..." see Amendment page 7, paragraph 1.

In response to Applicant's argument, Examiner respectfully disagrees with the applicant. The prior art of Byrne et al. (US Patent 6,347,312) teaches independent claims 1 and 11 (Byrne, Fig. 5, col. 5, line 50 to col. 6, lines 11). The in and out tables claimed and Type I cache and Type II cache are the same.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

*srp*  
Sathyanarayan Pannala  
Examiner  
Art Unit 2167

srp  
April 29, 2005

  
GEETA ROBINSON  
PATENT EXAMINER